

What is claimed is:

1. A marine safety ladder apparatus for use in combination with a platform structure located adjacent to and normally above a body of water, said ladder apparatus comprising:

a support bracket for attaching to the platform structure;

a ladder including a pair of elongate side rails pivotably mounted to said support bracket proximate respective upper ends of said rails and a series of transverse steps extending between and interconnecting said side rails, said ladder being pivotable through the water between raised and lowered conditions and further being buoyant within the water such that said ladder floats on the upper surface of the water when the water is above a threshold level and less than a predetermined external downward force is applied to the lower portion of the ladder;

said lower portion of said ladder pivoting downwardly into the lowered condition in response to at least one of the water level dropping to or below the threshold level and said predetermined external downward force being applied thereto, whereby at least a portion of said ladder is submerged when the water level is above the threshold level and the predetermined external downward force is applied thereto; and

a stop component attached to said bracket for limiting downward pivoting movement of said ladder into the lowered condition such that said ladder extends at a non-vertical angle relative to the upper surface of the water.

2. The apparatus of claim 1 in which said ladder is provided with a buoyancy such that the predetermined external force is at least two pounds.

3. The apparatus of claim 1 in which said steps are oriented between said side rails such that an upper surface of each step is held substantially horizontally when said ladder is in the lowered condition.

4. The apparatus of claim 1 in which said stop component is positioned such that said ladder forms an angle of approximately 45° with the upper surface of the water when said ladder is in the lowered condition.

5. The apparatus of claim 1 in which said ladder forms an angle of approximately 0° with the upper surface of the water when the ladder is in the raised condition.

6. The apparatus of claim 1 in which said support bracket carries a locking mechanism for releasably locking said bracket to the platform structure.

7. The apparatus of claim 1 in which said support bracket carries a pivot mechanism to which said side rails are pivotably mounted.

8. The apparatus of claim 7 in which said pivot mechanism includes an elongate pivot shaft to which said side rails are mounted.

9. The apparatus of claim 7 in which said stop component includes an elongate stop member carried by said bracket and extending generally parallel to said pivot shaft.

10. The apparatus of claim 9 in which said pivot shaft, said stop member and said side rails are arranged such that said side rails extend at an angle of 45° relative to the surface of the water and interengage said stop member when said ladder is in the lowered condition.

11. The apparatus of claim 7 in which said pivot mechanism supports said ladder such that said ladder is longitudinally extendable generally parallel to the outer edge of the platform.

12. The apparatus of claim 1 in which said pivot mechanism supports said ladder such that said ladder is longitudinally extendable transversely to the outer edge of the platform.

13. The apparatus of claim 8 in which said side rails include aligned slots for interengaging said pivot shaft.

14. The apparatus of claim 1 in which said stop member is interengagable by respective lower edges of said side rails to limit lowering of said ladder.

15. The apparatus of claim 1 further including a float element mounted to the lower portion of said ladder to provide said ladder with buoyancy.

16. The apparatus of claim 1 in which at least one of said side rails and said steps includes an integrally buoyant material.

17. The apparatus of claim 1 in which said side rails include longitudinal grooves for defining hand rails to assist a person climbing or descending said ladder.

18. The apparatus of claim 1 including a handrail attached to said bracket and extending upwardly therefrom.

19. A marine safety ladder apparatus for use in combination with a platform structure located adjacent to and normally above a body of water, said ladder apparatus comprising:

a support bracket for attaching to the platform structure;

a ladder mounted to said support bracket for pivoting through the water between raised and lowered conditions, said ladder having a buoyancy such that said ladder is floatable above the water in said raised condition when the water is above a threshold level; said ladder being pivotable downwardly into said lowered condition when a predetermined external downward force is applied to a lower portion thereof; and

a stop component carried by said support bracket for limiting downward pivoting of said ladder and for supporting said ladder in said lowered condition such that said ladder extends longitudinally in a non-vertical angle relative to the upper surface of the water.

20. A marine safety ladder apparatus for use in combination with a platform structure located adjacent to and normally above a body of water, said ladder apparatus comprising:

a ladder for mounting pivotably to the platform structure such that said ladder is pivotably movable through the water between raised and lowered conditions, said ladder having a buoyancy such that said ladder is floatable above the water in said raised condition when the water is above a threshold level; said ladder being pivotable downwardly into said lowered condition when a predetermined external downward force is applied to a lower portion thereof; and

a stop component for attaching to the platform structure and limiting downward pivoting of said ladder; said stop component supporting said ladder in said lowered condition such that said ladder extends longitudinally in a non-vertical angle relative to the upper surface of the water.